

On page 5, in the Brief Description of the Drawings, substitute the pending paragraph beginning on line 3 with the following:

① Fig. 1 illustrates a schematic view of an exemplary embodiment of a post combustion material (PCM) reclamation facility in accordance with the present invention.

On page 5, in the Detailed Description of the Exemplary Embodiments, substitute the pending paragraph beginning on line 11 with the following:

② Solid waste material such as Furnace Exhaust Material (FEM) is generated by the steel making process. The current invention contemplates removing some of the moisture content and/or otherwise recycling FEM material back into the process. The FEM is typically generated as particles collected from the drop out box, known as Post Combustion Material (PCM), or dust from the bag house, as described above. Different plants or operations in the steel industry may use different terms other than drop out box particles or bag house dust, however, the term "furnace exhaust material" as used in this invention should be understood to cover any iron-bearing material from the exhaust of a steel making furnace. Such furnaces may include a basic oxygen furnace, an electric arc furnace, a degasser, or any similar furnace creating solid material from the exhaust chamber. The iron-bearing material as used in the current invention further includes iron-bearing solid waste materials such as iron fines, scale, iron oxide from pickle liquor, or other similar steel making materials as known to those skilled in the art.

On page 12, in the Detailed Description of the Exemplary Embodiments, substitute the pending paragraph beginning on line 13 with the following:

③ An exemplary comparison of drying and mixing PCM with slag foaming materials and batch charging the mixture in charge buckets will now be discussed. Approximately

10,000 pounds of PCM was batch charged into a 200 ton heat of steel. Nitrogen increased in the steel by 15 parts per million (PPM). Further, when PCM was directly charged in the bucket, the kilowatt hour per scrap ton (KWH/ton) increased by about 37 KWH/ton. However, when the PCM was dried and mixed with slag foaming material in an amount of about 95% by weight slag foaming material and 5% by weight PCM (the mixture added weighing about 6400 pounds per heat, a typical foamy slag addition weight), an increase in KWH was not seen and the KWH actually appeared to decrease. This may have been due to oxidation of iron and manganese. Also, there was no increased nitrogen in the steel and the FeO weight percent in the slag did not increase.

In the Detailed Description of the Exemplary Embodiments, before the paragraph beginning on page 13, line 4, insert the following:

At 100% recovery, about 0.036% iron by weight would be added to the heat. In another embodiment, and as previously stated, the PCM in the slag foaming material may be increased to 30% and additional slag foaming material may be added to the heat to increase the weight percentage of the iron recovered. This may be based on the size of the heat, geometry of the furnace, thickness and content of the slag and other variables as would be obvious to those skilled in the art. Typical industry standards of slag volume/depth to heat size and the stoichiometry required to recover iron limit the total amount of PCM that may be added to a heat using the present invention such that the proportion of iron recovered in the heat from the PCM or other iron bearing materials is small compared to the size of the heat. For example, the iron recovery may be less than 1% of the total iron in a heat.

IN THE CLAIMS:

Please delete claims 21, 28 and 29.